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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JILL V. WATSON and C. GLEN WENSLEY

Appeal 2009-006752
Application 10/803,710
Technology Center 1700

Decided: May 13, 2010

Before BRADLEY R. GARRIS, CHARLES F. WARREN, and
TERRY J. OWENS, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-32. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

Appellants claim a battery separator comprising a microporous membrane coated with a mixture of cellulose acetate and a surfactant

combination comprising an organic ether and an oxirane polymer with 2-ethylhexyl dihydrogen phosphate (claim 1).

Representative claims 1 and 12 read as follows:

1. A battery separator comprising:

a microporous membrane; and

a coating on at least one surface of said membrane, wherein said coating comprising a mixture of 25-40 weight % polymer and 60-75 weight % surfactant combination, wherein said polymer being cellulose acetate, and said surfactant combination comprising a first surfactant and a second surfactant, said first surfactant having an active ingredient selected from the group consisting of organic ethers, said second surfactant being an oxirane polymer with 2-ethylhexyl dihydrogen phosphate.

12. The separator according to Claim 11, wherein said separator being freshly coated, and said separator being wetted within 8 seconds or less.

The Examiner rejects claims 12 and 28 under the second paragraph of 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter Appellants regard as the invention.

The Examiner's rationale in support of this rejection is set forth below:

The term "freshly coated" in claims 12 and 28 is a relative term which renders the claim indefinite. The term "freshly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

(Ans. 4)

The Examiner rejects claims 1-32 under 35 U.S.C. § 103(a) as being unpatentable over Taskier (U.S. Patent No. 4,298,666, Issued Nov. 3, 1981) in view of Buntin (U.S. Patent No. 3,811,957, Issued May 21, 1974).

The Examiner finds that Taskier discloses a battery separator comprising a microporous membrane of polypropylene coated with a mixture of cellulose acetate and surfactants such as ethoxylated 2-ethylhexyl phosphate (Ans. 4-7). Appellants do not dispute that Taskier's ethoxylated 2-ethylhexyl phosphate satisfies the requirement in claim 1 for "an oxirane polymer with 2-ethylhexyl dihydrogen phosphate." The Examiner acknowledges that Taskier does not teach using an organic ether surfactant in combination with the ethoxylated 2-ethylhexyl phosphate as required by representative claim 1 (*id.* at para. bridging 6-7). However, the Examiner finds that Buntin discloses a battery separator comprising a polypropylene membrane coated with an organic ether surfactant such as nonylphenoxy poly(ethyleneoxy)ethanol in order to render the polypropylene wettable (*id.*).

Based on these findings, the Examiner concludes that it would have been obvious for one with ordinary skill in this art to add Buntin's organic ether surfactant to the ethoxylated 2-ethylhexyl phosphate surfactant in the coating on Taskier's polypropylene membrane in order to enhance the wettability of the polypropylene (*id.*).

The § 112, Second Paragraph, Rejection of Claims 12 and 28

Appellants argue that, based on the dictionary definitions of the claim term "freshly", "a person of ordinary skill in the art would be reasonable [sic, reasonably] apprised that the scope of the invention [defined by claims 12 and 28] would include a battery separator which was newly or recently

coated with a polymer and a first and second surfactant” (App. Br. para. bridging 11-12). However, as correctly explained by the Examiner (Ans. para. bridging 7-8), the “newly” and “recently” definitions for the claim term “freshly” are themselves relative and indefinite. For this reason, we find no persuasive merit in Appellants’ argument that these dictionary definitions evince compliance with the second paragraph requirement of § 112.

Appellants also argue that, “[b]ased on the wetting time limitations of 8 seconds or less, the term “freshly” clearly falls within day 0 of [Specification] Tables 2 [sic, II] and 3 [sic, III]” (Reply Br. para. bridging 8-9). The Examiner responds to this argument by pointing out that the time period for which the separator is “freshly” coated is separate from the time period for which the separator is wetted (Supp. Ans., mailed 3 February 2009 in response to Appellants’ Reply Brief, 2). For this reason, the Examiner is unpersuaded by Appellants’ argument that the claim term “freshly” falls within day 0 of Specification Tables II and III (*id.*). We agree with the Examiner since the record before us contains no probative support for Appellants’ assertion that “the term ‘freshly’ clearly falls within day 0 of Tables 2 and 3” (Reply Br. para. bridging 8-9).

For the reasons set forth above and in the Principal and Supplemental Answers, we sustain the Examiner’s § 112, second paragraph, rejection of claims 12 and 28.

The § 103 Rejection of Claims 1-32

Appellants’ arguments concerning the § 103 rejection are directed to independent claims 1 and 17 (App. Br. 4). The Examiner correctly points out that the arguments for these independent claims, though presented under separate headings, are the same arguments (Ans. para. bridging 13-14). For

this reason, the independent claims will stand or fall together in accordance with the success or failure of Appellants' arguments. Furthermore, because they have not been separately argued, the dependent claims on appeal stand or fall with independent claims 1 and 17.

Appellants argue that "the Office has not made out a *prima facie* case of obviousness as the instant invention calls for the use of a combination of a first surfactant selected from the group consisting of organic ethers and a second surfactant being an oxirane polymer with 2-ethylhexyl dihydrogen phosphate which is not taught or suggested by either Taskier or Buntin" (App. Br. para. bridging 19-20, para. bridging 29-30).

"It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose." *In re Kerkhoven*, 626 F.2d 846, 850 (CCPA 1980). "[T]he idea of combining them flows logically from their having been individually taught in the prior art." *Id.*

This well established legal principle reveals that Appellants' argument lacks convincing merit. The above discussed surfactants of Taskier and Buntin are used for the same purpose (i.e., to make polypropylene wettable), and it would have been obvious to combine these two surfactants in order to form a third surfactant composition which is to be used for the very same purpose. The idea of combining the surfactants flows logically from their having been individually taught in the prior art of Taskier and Buntin. Moreover, this obviousness conclusion is reinforced by the fact that it was known to use combinations or mixtures of surfactants in the prior art of battery separators (Taskier para. bridging cols. 21-22).

For these reasons as well as the reasons expressed by the Examiner in the Principal and Supplemental Answers, we do not agree with Appellants that the Office has failed to establish a *prima facie* case of obviousness for the independent claims on appeal.

In further support of their nonobviousness position, Appellants argue that the comparative test data in Tables I, II, and III of the Specification establish unexpected results (App. Br. para. bridging 13-14, para. bridging 23-24).

Appellants' argument is unpersuasive for two fundamental reasons. First, the Specification does not characterize the data of Tables I-III as being unexpected (Spec. 13-16). Therefore, the unexpected-results characterization in the Appeal Brief constitutes mere attorney argument rather than a verified statement by one of ordinary skill in this art. We perceive little if any probative value in an attorney's mere assertion that Appellants' Specification data shows unexpected results. Second, this data is derived from specific compositional ingredients and amounts which are far narrower in scope than the independent claims on appeal. Therefore, even if the Specification data were assumed to show unexpected results, such data would not refute the *prima facie* case of obviousness established by the Examiner because the data is not commensurate in scope with the claims. *See Kerhovan*, 626 F.2d at 850-51.

Under the circumstances discussed above, we sustain the Examiner's § 103 rejection of claims 1-32 as being unpatentable over Taskier in view of Buntin.

CONCLUSION

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED

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